

Action Research on the Design of Search-and-Write Projects for Japanese EFL Students

Hideto D. Harashima

1.0 Introduction

Sometimes writing practice in an EFL class setting can be a dull activity for both teachers and students. EFL students are often asked to write about their immediate environment such as themselves, family, school, pastime, etc. These topics are basic and easy to write about but they bore students easily. While thinking of how writing activities can be more interesting to his students, the author has come to realize the importance of adopting Internet research projects to writing classes.

There is no doubt that the WWW has become the richest information resource for EFL students, since English resources are in most cases extremely limited in the libraries of those schools in a non-English-speaking country such as Japan. However, the problem is, most EFL students in Japan are unfamiliar with proper information search skills in a foreign language. "How can I lead them to be more literate and motivated for information search in English?" This question was the start of this action research.

This has project has entailed four years of empirical study at Maebashi Institute of Technology in Japan on how teachers of CALL or writing can design search-and-write projects in the best possible way. It has been individualistic action research done by the author alone. Through a number of trials and reflections on improving search-and-write activities, the author has found seven keys to a good search-and-write project.

Seven Keys to Consider for Designing a Good Search-and-Write Project

1. Sheltered search activity
2. Autonomous search activity
3. Variety of information sources
4. Subjective over objective information search

5. Appropriate instruction on search techniques
6. Appropriate selection of research topics and methods
7. Project memo

In the subsequent discussion the author will try to explain each key in detail.

2.0. Sheltered search activity

Novice students to Net surfing are usually disoriented and easy to go astray. In effect, the class could get disorderly and result in many faces in dismay. At such an introductory level, “sheltered” research projects with substantial teacher control is desirable. A teacher can set a portal site as a base, and let his/her students surf to a limited range of sites from the base site, preferably no more than one link away from the base.

The first-year project the author attempted with his students was such a sheltered project with CIA World Fact Book as the portal site.

Project (1) -- Using the Web

Use the World Wide Web on the Internet and complete the following task.

1. Go find the resource page of your target country at <http://www.odci.gov/cia/publications/factbook/docs/profileguide.html>
2. Find answers to the following questions in the resource page.
3. Collect the facts about the target country and write an essay introducing the country.
A sample essay is available on the right page of this handout.
4. The essay is due on _____

Find out the following:

- * official name of the country:
- * location and topography: Where is it located? Describe the geographic constitution of the lands.
- * nationality:
- * population: Compare it with that of Japan.
- * total area: Compare it with other country or state.

- * arable land:
- * type (form) of government:
- * head of government:
- * chief of state:
- * capital city:
- * religions:
- * labor force typology by occupation:
- * GDP per capita:
- * imports and exports:
- * history: When was it founded (become independent)?

After the project work was done, the author attempted to evaluate it.

Project (1) Review

Good points	Bad points
<ol style="list-style-type: none"> 1. For the teacher, it was easy to control the task. 2. For the students, it was easy to find the necessary information. 	<ol style="list-style-type: none"> 1. Students didn't have to surf the Net by themselves. Consequently, they didn't learn the skill of searching for relevant information on the Net. 2. Students' products tend to be all alike, simply listing the facts copied from the resource page. 3. Students were not exposed to a chance to examine the information critically.

Based on these reflections, the need for a better research activity resulted in the following:

- 1) to build up students' basic data search skills and help them learn how to use search engines effectively,
- 2) to let them browse through a variety of English Web sites, and
- 3) to induce them to realize the difference between searching for information in a

high-tech way and in a conventional way; namely, on the Internet and in the libraries.

3.0 Autonomous search activity

Not to mention, the essence of research is an autonomous pursuit of truth, and such autonomous attitudes should be fostered through students' research projects. Moreover, students should be allowed to enjoy the freedom of being exposed to a variety of information sources. The sheltered search activities mentioned above apparently do not accommodate these needs. The author felt a strong need to revise the project to allow more student autonomy in its design.

4.0 Variety of information sources

There are certainly problems with the case where students are exposed to only one or limited information sources. It doesn't foster critical thinking habits, or *media literacy*. It might create a passive attitude among students, for they may tend to uncritically receive a single source of information as the *authorized* information. It might also encourage plagiarism, because students' products become inevitably alike. Therefore, it is important to allow students the freedom to visit a variety of information sources.

One way to let students be exposed to different information sources is to let them compare library research and Internet research. Trying to reach the answer to one query by searching through books in the library and by surfing on the Net, the students might find different benefits, or maybe even different answers, in the two ways of information search.

In the second year, the author revised the search-and-write project to incorporate more student autonomy and variety.

Internet Research Project (2)

Class: _____ Number: _____ Name: _____

Follow the example and complete the charts below.

Query (example)	What language is spoken by the largest number of people?
Search engine	Altavista
Resource site (The title and the URL)	The Languages of the World http://www.ling.gu.se/sprakfrageladan/English/eng-sprak-i-varlden.html
Internet search results	Mandarin, 700 million speakers
Reference book	International Encyclopedia of Linguistics (Bright, 1992)
Library search results	Mandarin Chinese. It is spoken by est. 726 mill. of people
Comparison	Time difference: (I) 45 min (L) 15 min. Degrees of trouble: インターネットの場合色々なサーチエンジンを試していたためとても時間がかかった。本はすぐに見当がついて素早く探せた。 Differences in results: 本に拠れば 7 億 2 千 600 万人と細かい数字が出ていて、ウェブページでは 7 億人と出ていた。本が 92 年でウェブは 96 年の資料を元に行っているようなので、ウェブの方が信頼できると思いたいが、人口がそれほど急激に減ると思えずどちらの方が信頼性が高いとは言い難い。

Query 1	What's the name of the pet cat of Bill Clinton?
Search engine	
Resource site (The title and the URL)	
Internet search results	
Reference book	
Library search results	
Comparison	Time difference: (I) (L) Degrees of trouble: Differences in results:

Query 2	Which country is the worst in the amount of CO ₂ emission?
Search engine	
Resource site (The title and the URL)	
Internet search results	
Reference book	
Library search results	
Comparison	Time difference: (I) (L) Degrees of trouble: Differences in results:

Query 3	What countries have ratified the CTBT?
Search engine	
Resource site (The title and the URL)	
Internet search results	
Reference book	
Library search results	
Comparison	Time difference: (I) (L) Degrees of trouble: Differences in results:

Query 4	Are AIDS victims increasing or decreasing?
Search engine	
Resource site (The title and the URL)	
Internet search results	
Reference book	
Library search results	
Comparison	Time difference: (I) (L) Degrees of trouble: Differences in results:

Query 5	Is NAFTA successful or unsuccessful for Canada?
Search engine	
Resource site (The title and the URL)	
Internet search results	
Reference book	
Library search results	
Comparison	Time difference: (I) (L) Degrees of trouble: Differences in results:

After completing Project (2), the students evaluated the project.

Students' Evaluation of Project (2)

1. There were too many sites to search through on the Internet. The book search was easier and much quicker.

2. Google and Yahoo! were easier and more effective than AltaVista.
3. It was difficult for me to narrow down the scope of the search on the Internet.
4. I realized that I must become good at English to fully utilize this largest information resource in the world (Internet).
5. I realized that I have to use simple Japanese key words when I do book searches on the library catalogue computer.
6. We can get newer data on the Internet than in books. I was disappointed when I found very old data in library books.
7. I got more detailed data in books.
8. The Internet search got very smooth and fast when I realized that I should use the key word “data”, or “increase” and “decrease”.
9. When I thought up the key word combination of “Clinton +pet,” I got a really quick answer.

Again, the author attempted a self-evaluation of the project.

Project (2) Review

Good points	Bad points
<ol style="list-style-type: none"> 1. The students learned how to use search engines, and their skills in using search engines improved. 2. The students learned differences between doing research on the Internet and in the library. Also they learned the benefits of using them differently for different research purposes. 	<ol style="list-style-type: none"> 1. Most of the queries were asking for simple objective information. The whole task became like an answer-finding game. 2. Most queries were biased toward socio-political issues. Not very intriguing for technology major students. 3. Some of the answers were very quickly found in an almanac or a statistical abstract in the library. 4. There weren't enough books in English for the project. Students ended up reading Japanese books and reference materials.

	5. Internet connection was not as stable as expected
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To respond to the above reflections, the author needed to make the project more relevant to his students' major studies. Then he tried revising the project as follows.

Research Project (3-Prototype) For Engineering Students

Find an answer to one of the following queries via two different approaches: an Internet search and a library search.

Queries

Civil Engineering class	What is the longest bridge in the world?
Architecture class	What is the tallest building in the world?
Information Engineering class	What is the oldest computer in history?

This looked good at first. The author, however, did not implement it in his classes, because he immediately realized it contains the following problems.

1. The queries are all calling for simple objective facts.
2. An activity of reporting on some objective facts is prone to plagiarism.
3. It can be finished quickly, and once the students find the answer, they might lose interest in the query.
4. It doesn't help students develop their search skills very much.
5. It might become like a fact-digging game, which offers little room for intellectual investigation, critical thinking, data analysis, authenticity evaluation, appreciation of different values, -- in other words, an insight into Media Literacy.

These problems led the author to the idea of introducing a search activity for *subjective* information, rather than *objective* information. An activity of searching for conflicting ideas about some controversial issues to create one's own opinion seemed very much worthwhile.

5.0 Subjective over objective information search

Objective information search is usually straightforward and easy to do. However, it contains some problems as listed above. Subjective information search, on the other hand, could elevate students' overall research competence, encourage them to think critically, urge them to create their own views after evaluating different opinions, and hopefully promote Media Literacy. Looking for, and correctly understanding, subjective information is very challenging, but students will learn many things from the challenge.

6.0 Appropriate instruction on search techniques

Autonomous research on the Internet may end up in student dismay without proper guidance on search techniques by the teacher. Search techniques includes practical knowledge of how to use search directories and search engines effectively, useful keywords, advanced search techniques, other search tools and databases, and research aid organizations. Teachers should try to help their students get familiarized with those techniques before they introduce Internet search activities to students.

Especially, for students to know some basic search key words is very important. See Harashima (2001: 255) for a list of some useful key words for objective and subjective information search.

After introducing those techniques, the author implemented the following revised project.

Research Project (3) For Engineering Students

Write a two-page (or more) report on one of the following queries via two different approaches: the Internet search and the library search.

7. I believe in reading books and increasing my general knowledge steadily. The Internet is only useful for a quick search or for a search of global scope.
8. Internet is great! You don't have to "travel" to the libraries to find information. You can search for anything right there, and anytime!
9. It was very frustrating to find that the relevant books were all loaned out from local libraries. The Internet does not have this problem.
10. Information on the Internet all seems like personal opinions. Whereas, information in books is generally written by distinguished authors and it is reliable.
11. I found the information in books was more in depth than that on the Internet.
12. The library search was not a problem for me, because I had tried the Internet search beforehand and got general information on the query.
13. Checking many heavy books on the library shelves was physically very tiring. Internet was more comfortable.
14. On the Internet, it was interesting to find that the relevant information got broader and broader as I added different key words and followed from one link to another. You can't do this in the library.
15. Book search is easier for me, since I'm not very skilled with computers.
16. The Internet is by far easier and more effective.
17. On the Internet, I found it very exciting to get information from all over the world in a snap.
18. On the Internet, I found that the success or the failure of searching really depended on whether I could find appropriate key words or not.
19. Once you have a library material and a pen and a notebook, you can write a report wherever you are. It's more handy than the Internet.
20. I realized that on the Internet, there were a lot of junk information as well as useful information. Also, there were web pages which advocated completely opposite views from each other. So, I learned that I had to be cautious when I use the Internet.

Again, the author tried his personal review of the project (3).

Project (3) Review

Good Points	Bad Points
<ol style="list-style-type: none"> 1. Though the searching activity for subjective information was very challenging, the students seemed to have learned an important part of Media Literacy, i.e., to look at online information critically, and to select and choose valuable information swiftly. 2. The students learned how to analytically interpret the data found in web sites and books. 3. The students realized the importance of combining some crucial keywords on the Internet search. 4. The students realized the need for learning English harder in order to get the most of the Internet. 5. The students learned the Internet is beneficial for gathering a lot of different views on one subject. 6. The subjective information search activity seemed to show resistance against plagiarism. 	<ol style="list-style-type: none"> 1. Some students were overwhelmed by a flood of incomprehensible information in English. 2. Substantial Information on some of the topics was hardly found in books in the local libraries. 3. There were not a few cases where the teacher couldn't distinguish a citation clearly from a student's original text. 4. There were many cases where citations were not very well documented. 5. There was no telling if the students used translation software/service or not. 6. Students were not free to choose the topics of their personal interest.

7.0 Appropriate selection of research topics and methods

We must realize that not all research topics are suited for Internet search. We need wisdom on the selection of research topics. Awareness of the advantages and the disadvantages of Internet research and library research, in terms of effectiveness and quality of information, must be raised among students. The author has empirically found some suitable areas of queries for the two methods respectively.

Topics empirically learned to be suitable for researching on the Internet are, current issues, statistical data, frequently updated data, discussion results, quick data search, personal information, controversial issues, institutions and their activities, IT-related information, and business-related information.

Topics for library search include historical or chronological events, established values, thoughts, theories, and systems, famous people in history, works of specific areas (literature, art, architecture, etc.), information about the 3rd-World countries, and academic studies in depth.

8.0 Project Memo

Once in a while, the author happens to notice that some students misunderstand the task objectives. They don't realize what they are supposed to do until the last moment. It is very disappointing. The problem is they don't like to consult with, or show their incomplete works to the teacher. Another disappointing finding is that the students are very unfamiliar with making citations. In most cases the teacher cannot distinguish the students' original texts from cited texts.

In order to rectify those problems, the author started to have students submit initial and interim project memos to help them hold clearer ideas about the course of the project in the fourth year. (See Harashima (2001: 256-7) for the details of the memos.) With these memos, students seemed to better understand what their goals were and how they should identify and separate opinions of other people from their own opinions. It became an integral part of the following project (4).

Research Project (4)

Think of one big controversial issue of your interest, preferably something of international concern. Do the search for diverse opinions on the topic of your choice through the Internet or in some libraries. Write a two-page (or more) essay in English on the topic, following the guidelines below.

Guidelines

1. Decide on a subject of controversy. (Don't copy the ones of your friends.)
2. Do the search and find at least two affirmative and two negative views on the subject.
3. Weigh up the pros and cons, and form your own opinion.
4. When you cite people's opinions, make sure each citation is well documented including its URL or publication details. Also, be careful not to garble the citation with your own words. In other words, make clear distinction between a cited text

and your original text.

Some examples of controversial issues (**Please do not make your choice from this list.**)

- * Three Gorges Dam project in China
- * The glass pyramid structure at the entrance to the Louvre Art Museum in Paris
- * Japanese whaling for scientific studies
- * Surrogate mothers
- * Introduction of English lessons into Japanese elementary schools

The author at the same time did not forget to present a mock research paper, in which he included many examples of in-text citations. The students were advised to follow the examples when they quote from somebody. See Harashima (2002) for an example of in-text citations.

Topics chosen by the students

Euthanasia
Human Cloning
Genetically Manipulated Food
Marriage between the Same Sex
Ratification of Kyoto Protocol
Disposable Utensils
Logging Business in Rain Forests
Nuclear Weapon Development/Testing
National Missile Defense
Nuclear Power Plants
Stiffening the Juvenile Laws
Violence Scenes on TV
Educational Reform
Co-hosting of the World Cup Soccer Events
Official Visit of the Prime Minister to the Yasukuni Shrine

Appointment of Makiko Tanaka to Foreign Minister

Project (4) Review

Good Points	Bad Points
<ol style="list-style-type: none">1. Students were more than ever motivated for doing research on the topic of their choices.2. Students were not compelled to do research in two ways: in the library and on the Internet. They freely referred to books when they thought it necessary.3. By studying the citation samples and by completing two project memos, students seemed to have a clearer vision toward the completion of a report in style.	<ol style="list-style-type: none">1. Some stubborn students chose topics that were beyond their general knowledge levels, or themes with not many conflicting views.2. Quotation still occupies more area than students' original texts in the reports.

The above reflections suggest that a good deal of guidance is still needed to raise students' awareness of how they should construct their own ideas while giving due credit to the opinions of others.

9.0 Conclusion

This action research is an on-going and open-ended project. It seems it will never be completed. However, the seven keys presented earlier in this paper will cover the most fundamental issues involved in designing students' search-and-write projects. It is the author's hope that they will be of help for some educators when they design and implement a search-and-write project to their classes.

References

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要旨

英語情報検索と作文課題の計画と実行に関するアクション・リサーチ

原島 秀人

日本の大学の英語学習者に図書館の書籍やインターネットを利用して英語情報検索をさせ、それに基づいてリサーチペーパーを書かせるプロジェクトを行った。この取り組みについての4年間に渡るアクション・リサーチの結果を報告する。日本の大学生においてはまだインターネットを利用した英語情報検索の方法に習熟している者は殆ど居らず、研究の初期段階においてはそういった学生をまずインターネットの使い方や情報検索の仕方に慣れさせるところから始めざるを得なかった。学生がネット上で迷子にならないように行動範囲を決めての活動であった。その後学生の自律的な学習形態を次第に導入し、多彩な情報源を独力で探し出す力をつけさせる指導に入ってしまった。当然そこでは検索エンジンの効果的な使い方やキーワードの選択の仕方などを適切に指導していく必要があった。またこのプロジェクトが単なる答え探しのゲームのような物にならないためにはどうしたら良いかについて試行錯誤があった。結局、単純な客観的事実だけを検索させる活動ではクリティカル・シンキング、メディア・リテラシー、自己意見形成、といった現代の情報社会を生きるために重要な能力を養成することにつながらないことが分かった。そこで、敢えて主観的な見解が満ちた情報、対立意見が乱立するような問題を調べさせることにした。それにより学生達は違った内容を持つ情報の信頼性・妥当性を吟味し、互いに比較し、それらを検討した上で自分の意見を作り上げるというプロセスを学んで行った。また、インターネットが全ての情報検索に適しているわけではなく、図書館を利用した伝統的な情報収集の方法にも利点があるはずであり、それら二つの方法・手順の利点・欠点を比べさせ、どの様なトピックがどちらの検索方法により適しているかを検討した。最後に、プロジェクトの進捗状況を確認、戸惑っている学生に対して適切な個人指導をし易くするためのプロジェクトメモの活用も考案した。